

On the Question of the Archaism of the Hittite Verb

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Hittite is chronologically the oldest of the attested Indo-European languages. Its verbal system is in several aspects different from the "classical" system which one reconstructs for PIE in the absence of Hittite. Because of this, there has been a natural temptation to view the Hittite system as more archaic than the system which we once reconstructed, and to conclude that the Anatolian languages split off from the rest of PIE before the full development of the classical system. In this paper I will argue that in several respects, the rest of IE tells us more about the prehistory of Hittite than the Hittite verb tells us about the prehistory of IE.

Hittite has only two active conjugation classes: the so-called *hi-* and *mi-* conjugations, named for the endings of the first singular present. There is also a middle conjugation in Hittite. The system reconstructed for PIE (primarily from Greek and Sanskrit) has three formal conjugation classes in the active, as well as a middle voice. The PIE athematic active conjugation, with first singular present in *-mi*, corresponds to the Hittite *mi* conjugation. Since the *i* of the ending *mi* is a marker of present, I will refer to this conjugation as the M-conjugation. Hittite has no dual, and has lost all conjugational distinctions in the plural. Analogy in the dual and plural endings is common elsewhere in IE. In this paper I will limit myself to the discussion of the singular. The singular inflections are:

Athematic Active (M-endings)

	Non-Hittite			Hittite		
	1	2	3	1	2	3
pres.	mi	si	ti	mi	si	zi (tsi) < *ti
past	m	s	t	un < *m	s	t

In this inflection the "past" endings are really non-present, at least in the proto-language. They undoubtedly represent the oldest set of endings, before the development of tense oppositions. The present endings are derived from the non-present by the addition of a particle *-i*.

The *hi*-conjugation in Hittite corresponds to the perfect inflection in non Hittite PIE. A laryngeal is reconstructed in the first singular in both Hittite and non-Hittite IE, so I will call this set of endings the H-conjugation. The *-a* ending for the first singular in the Greek perfect is from **H_ae*. The *-hi* found in Hittite must be the same ending with the addition of the present marker *-i*, with **hai* > *hi*. Several other IE languages show a similar addition of the *i* to the perfect endings. Corresponding to Greek *oīda*, Vedic *veda* < **woida* 'I know', we find OCS *vědě*, Latin *wīdī* from **woidai*. The spread of the present marker must have been independent in the various languages. There is no agreement in the reconstruction of the past/non-present endings in this conjugation class. The endings in the singular are:

H-endings

	Non-Hittite Perfect			Hittite hi-Conjugation		
	1	2	3	1	2	3
pres.	a < *H _a e	*tH _a e	e	hi < *H _a e-i	ti < *tH _a e-i	i < *e/o-i
past	?	?	?	hun < hVm	s, ta, sta	s, ta, sta

For Hittite, the merger of the second and third person singular in the past is systematic. If there are reconstructable endings for the pluperfect in non-Hittite IE, they are probably the same as the past endings of the M-conjugation. At least that is what we find in Sanskrit and in the plural of Homeric Greek. The Hittite first sing. *-hun* seems to be a combination of the H-ending and the M-ending. The second and third person endings are less easily explained.

The third non-Hittite active conjugation is the thematic conjugation, in which a partially distinct set of endings is added to an ablauting *-e/o-* suffix, the theme vowel. For purposes of this presentation, I will refer to them, as the \bar{o} -endings. The endings are:

\bar{o} -endings

	1	2	3
present	$\bar{o} < *oH$	$-e-(H_1)i, -e-s-i$	$-e, -e-t-i$
past	$-o-m$	$-e-s$	$-e-t$

I have listed two sets of ending for the second and third person. Through the first half of the twentieth century, it was normally concluded that the endings that are the same as the athematic active were original. At least since Watkins (1969) this has been called into question. Since the first singular is clearly different from the athematic active, it is at least reasonable to suppose that the endings in the rest of the singular were once different as well. The endings identical to the athematic inflection could be due to analogy. A recent general introduction to IE (Beekes 1995:233) simply lists the PIE endings as *-oH*, *-eH₁i*, *-e*. The evidence for the laryngeal in the second person comes from the acute intonation in Lithuanian¹.

Hittite does have a thematic inflection, but it is much less frequent than in the rest of IE. Primarily it is found with the suffixes **-j-e/o-* and **-sk̄-e/o-*. The endings are those of the mi-conjugation, in their post-vocalic variants. Examples with **-sk̄-* are:

	1	2	3
Pres	$-sk-i-mi$	$-sk-i-si$	$-sk-i-zzi$
Past	$-sk-i-nun$	$-sk-i-s$	$-sk-i-t$

Starting at least with Holger Pedersen (1938:80-86) and progressing through the work of Ivanov (1965, 1981), Toporov (1961), and Watkins (1969), we find proposals that the present endings of the non-Hittite thematic inflection can be related to those of the perfect and the hi-conjugation, thus reducing the non-Hittite IE to the same system as Hittite.

It is quite possible that the \bar{o} of the first person is made up of the theme vowel *-o-* plus the same a-coloring laryngeal which occurs in the perfect. A-coloring laryngeals may not affect an original *-o-*, except to lengthen it. The third person in *-e* is phonologically identical to the *-e* of the perfect, but it is functionally different. In the perfect it is a person-number ending, while in the thematic inflection it is a suffix. The third singular ending in the reconstruction of the thematic paradigm is zero. Watkins (1969, Chapter 8) argues that the thematic paradigm could have been rebuilt from the third singular, adding the person number endings to the form with *-e*. This amounts to a reinterpretation of the third singular as having a zero ending. This, he argues, is a natural development for the maximally unmarked person.

This leaves the second singular to be accounted for. While **eHi* is indeed different from the M ending, it is not derivable from the *-tH₁ae* of the H inflection either. Tokharian has an attested ending which is reconstructable as *t* plus some (elided) vowel. However, the Tokharian *-t* is the only present active second singular ending in Tokharian, so it is not specifically linked to the thematic inflection. Moreover, there may be phonological problems with the assumption that Tokharian *-t* can come from **tHa*. Van Windekens (1982: 261-3) points out that final /a/ should not disappear in Tokharian B. An alternative would be to assume a postposed second singular pronoun *-tu*, a solution Van Windekens attributes to Meillet.

The possible similarities between the o-endings and the H-endings are at least enticingly interesting. Hittite, however, provides no support for a claim of common origin for the two sets of endings. Hittite, after all, has M-endings in the paradigm of thematic verbs. Watkins argues that Hittite, which uses *-i* as the marker of the present more consistently than other IE languages, simply generalized the pattern of adding *-i* to the past endings to produce the present endings. This is certainly a valid proposal, but it entails the admission that Hittite eliminated the original endings of the thematic paradigm. Hittite therefore provides no information whatsoever as to what these endings were in PIE.

Hittite does, however, agree with the rest of IE in having endings of the past tense of the thematic inflection identical to those of the M-inflection. Watkins argument assumes that this situation obtained in PIE. These endings are not shared by the H-inflection in Hittite, and may well not be shared with the

perfect in the rest of IE. If we use the agreement and non agreement in combinations of endings, we can set up three correspondence sets for paradigms in PIE.

- I. M-conj.: M-endings in both the present and nonpresent in both Hittite and non-Hittite IE.
- II. H-conj.: H-endings in present in both Hittite and non-Hittite IE, no agreement in past.
- III. Thematic: M-endings in past in both Hittite and non-Hittite IE; no agreement in present [but no distinctive disagreement].

Thus the comparison of Hittite with non-Hittite IE can be used to justify the claim that there were three distinct active paradigms before the division between Proto-Anatolian and the rest of IE. The odd feature of the thematic paradigm in Non-Hittite IE, with \bar{o} -endings in the present and M-endings in the past, is sufficiently irregular to be considered part of PIE. It seems likely that tense oppositions developed first in the M-conjugation, formed by adding the particle *-i*, to emphasize a present continuous meaning. Since the surviving endings of the \bar{o} -conjugation and the H-conjugation are in the present, we could assume that the unmarked tense interpretation of these conjugations was present.

This makes sense from the point of view of non-Hittite IE (cf. Darden 1994). If we accept the arguments that the thematic aorists are a late development (Watkins 1969: Chapter 8), then all the verbs in the original thematic conjugation were atelic (imperfect/present). The H-conjugation in non-Hittite (the so-called perfect) likewise had no aorists. It was made up primarily of resultative statives, stative verbs of perception and emotion, and iterative verbs for sounds. It makes sense that these verbs would have an unmarked tense reference of present. The aorists would have had an unmarked reading which was not present. Since the M-conjugation had both aorists and nontelic verbs, it was this conjugation that had the most need for a marker for tense reference, and it was this conjugation which first used the *-i* to mark present continuous activity.

The thematic verbs included many verbs for activities, for which tense distinction could be useful. Apparently the endings of the M-conjugation that were associated with non-present tense reference simply spread to the thematic paradigm. This innovation was PIE, shared with Anatolian. Anatolian, however, apparently split off before there was any common way of differentiating tense for the H-conjugation. It developed its own. Whether non-Hittite IE developed a common pluperfect before it split up is open to debate.

We have so far discussed only the active paradigms. The middle voice has also played a role in the arguments that originally there were only two basic paradigms of the verb in PIE. Non-Anatolian IE provides some evidence for similarities between the middle endings and those of the H-conjugation, but the discovery of Hittite removed all doubt. The basic Hittite middle paradigm, compared to the hi-conjugation is:

	middle		hi-con	
	pres	past	pres.	past
1	ha (-ri)	hat (-i)	hi < hai	hun
2	ta (-ti/-ri)	tat (-i), -ta, -at	ti < *(h)ai	s/ta/sta
3	a/ta (-ri)	at/tat (-i)	i < *e/a-i	s/ta/sta
3 pl.	nta (-ri)	ntat (-i)	ntsi < *nti	ir

For the singular the similarities are striking. The major differences are in the third person. In the singular, the *-a*, *-ta* must go back to *-*o*, *-t-o*. The evidence from IE perfects would indicate that the H-conjugation should have had an *-e* before the addition of the present marker *-i*. Hittite is the only language with really solid evidence for a different ablaut grade of the ending in the middle. Kuryłowicz (1964: 62-3) and Jasanoff (1978: 42-3) suggest a systematic change of *e* to *o* in the middle endings. In a later paper Jasanoff (1994) suggests a sound change of *e* > *o* before word final *r*.

The *-to* is well attested elsewhere as a middle ending (Skt. *-ta*, Greek *-to*). The same is true of **nto* in the 3rd. plural. These two endings seem to show the beginning of a tendency to build the endings of the middle by adding *-o* to the active M-ending. This is extended to the second person to form *so(i)* in Indo-Iranian, Greek, and Germanic.

In non-Anatolian IE we find middle endings which are similar to those of the perfect (with either *i* or *-r* added), endings made up of M-endings plus *-o*, and endings which are agglutinative combinations of M and H endings. Hittite seems to confirm that the endings like those of the perfect are the most archaic. Examples of these endings are:

Present:

First singular: Hittite *-ha(ri)*, Skt., Avestan *-e < -*ai < *H_{ae}-i*

Second singular: Hittite *-ta-(ri)*, Tokharian A *-ta[̄]r < *tar*, Old Irish *-ter*²

Third singular: Hittite *-a-(ri)*, Skt. *-e < -*e/o-i*, Old Irish passive *-ar*

Past:

First singular: Hittite *-ha-t (i)*, Tokharian A *e < *ai*

Second singular: Hittite *-ta-(ti)*, Skt. *-tha[̄]s < ?*tHa-es?*, Tokharian A *-te < *ta-i*

Third singular: Hittite *-a-t (i)*. Watkins (1969:90) sees evidence for two Sanskrit forms with *-a < -*e/o* in *aduha*, *ais'a*.

In Indo-Iranian Greek and Germanic the present-marking *-i* was apparently used to differentiate the present of the middle from the past. In Latin, Celtic, and Tokharian, an *-r* was added to the middle endings, similar to the optional *-ri* in Hittite. Hittite seems to use the particle *-i* to differentiate the *hi*-conjugation from the middle. Watkins (1969: 194-7) suggests that the *-r*, like the *-i*, was originally a particle. Based on the data we have, we could argue that at the time of the division between Proto-Anatolian and the rest of IE, the distribution of these particles was still fluid. Moreover, we could argue that there was not yet a fixed differentiation between the present and past of the middle voice. The Hittite past tense marker *-(t(i))* has no cognate form in any other IE branch.

I do, however, accept Cowgill's (1979) contention that within predivisinal PIE, the middle voice had attained independent status as a grammatical category, with slightly differentiated endings. There are direct formal cognates between middle verbs in Hittite and in non-Anatolian IE.

The formal similarity between the middle and the H-conjugation, as we have seen, is obvious in Hittite. In Hittite itself, however, this similarity is an unmotivated historical oddity. To find a functional relationship we must look to the rest of IE. The existence of a semantic relationship between the perfect and the middle voice has been long established (Kuryłowicz 1964: 61). This is most obvious in Homeric Greek, which best preserves the archaic meaning of the perfect. When the basic meaning of the verb involves a change of state, the active voice will normally indicate an agentive change of the state of the object. The middle voice will have the object of the active construction as its subject, and will indicate a change in the subject. The perfect will have that same subject, and indicate the resultant state. Examples are:

active	middle	perfect
egeírō 'rouse'	egeíromai 'wake up [intr]'	egrégora 'be awake, alert'
hístēmi 'stand [trans]'	hístamai 'stand up [intr]'	héstēka 'stand [intr]'
péithō 'persuade'	péithomai 'be persuaded'	pépoitha 'trust'

Kuryłowicz correctly characterizes the contrast between the middle and the perfect as one of action versus state. He overstates the case, however, in characterizing what they share as intransitivity. Both perfects and middle verbs can be transitive. Kuryłowicz himself cites perf. *dédorka*, middle *dérkomai* 'see', perf. *proséboula*, middle *boúlomai* 'prefer'. The archaic perfect can be described as a state of the subject, while the subject of the middle verb is the locus of the change or process. The object of a verb in the perfect or middle voice is unaffected by the process.

At a deeper level of prehistory there may well be more to the similarity between the H-conjugation and the middle. Pedersen (1938:80-86) proposed that pre-Indo-European may have had a verbal opposition which opposed the athematic active to the precursors of the middle, the thematic inflection, the perfect, and the Hittite *hi*-conjugation. He suggested an opposition like that found in Caucasian languages such as Avar. He called the opposition transitive/intransitive. For the reasons given above, there are problems with the label transitive/intransitive. Gamkrelidze and Ivanov (1984: Chapter Five) offer a much more extensive typological justification for a claim that the opposition was active/inactive.

These reconstructions for pre-PIE may well be justified, although they are admittedly speculative. The point that I want to make in this paper is that the speculations most probably apply to a period well before the division between Proto-Anatolian and the rest of IE. For the phenomena that I have been discussing, Hittite confirms independent suspicions about the archaic nature of some elements in IE, but we do not have to go back any further than the level of PIE which was reconstructible without Hittite. For these phenomena, the rest of IE offers more of an explanation for the prehistory of Hittite than Hittite does for the rest of IE.

Notes

1. This is possibly justified. There are problems with acute intonation on diphthongs in final position, but I cannot go into them in detail here. I will just point out that we find acute intonation on the first and second singular of the athematic inflection in Lithuanian, where no post-vocalic laryngeal is justified. The acute shows up when the reflexive particle follows: *-mì*, *-miesi*, *-sì*, *-sies*. The Old Prussian endings *-mai*, *-sai/-sei* indicate diphthongal endings, possibly from the middle paradigm (Stang 1966: 406-8).
2. I have no explanation for the vowel in this form.

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